



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

**75 Hawthorne Street
San Francisco, CA 94105-3901**

DEC 15 2004

**Laurence K. Lau
Deputy Director for Environmental Health
Hawaii Department of Health
P.O. Box 3378
Honolulu, Hawaii 96801**

Dear Mr. Lau:

EPA promulgated water quality criteria for bacteria on November 16, 2004 in response to requirements contained in the BEACH Act. These criteria apply to Hawaii's waters located more than 300 meters (1000 feet) from shore. This rule will take effect on December 16, 2004. EPA's promulgated criteria augment Hawaii's existing bacteria criteria for recreational waters. This letter sets forth EPA's understanding of Hawaii's current standards and how we intend to apply them in evaluating the City and County of Honolulu's (CCH) requests for Clean Water Act 301(h) secondary treatment waivers and, if we determine that the 301(h) waivers should be renewed, in developing permit limits. We would appreciate your confirmation that our interpretation of the Hawaii Department of Health's (HDOH) water quality standards is in accord with yours. If you have a different interpretation, please inform us in writing how the standards currently in place should be interpreted, applied, and assessed.

Following is our understanding of Hawaii's water quality standards:

- **Section 11-54-8(b) of the Hawaii Administrative Rules (HAR): (1) In marine recreational waters: Within 300 meters (1000 feet) of the shoreline, including natural public bathing or wading areas, enterococcus content shall not exceed a geometric mean of seven per one hundred milliliters in not less than five samples which shall be spaced to cover a period between twenty-five and thirty days. No single sample shall exceed the single sample maximum of 100 CFU per 100 milliliters or the site-specific one-sided 75 per cent confidence limit. Marine recreational waters along sections of coastline where enterococcus content does not exceed the standard; as shown by the geometric mean test described above, shall not be lowered in quality. (2) At locations where sampling is less frequent than five samples per twenty-five to thirty days, no single sample shall exceed the single sample maximum nor shall the geometric mean of these samples taken during the thirty-day period exceed 7 CFU per 100 milliliters.**

H-14-23

- EPA's promulgated bacteriological criteria, which apply to marine recreational waters beyond 300 meters (1000 feet) of the shoreline, contain a geometric mean of 35 CFU per 100 milliliters and a single sample maximum (SSM) value, to be determined by HDOH, ranging between 104 and 501 CFU per 100 milliliters.
- All State ocean waters are designated by Hawaii for recreation and thus are considered "coastal recreation" waters under the BEACH Act.
 - HAR section 11-54-3(c)(1) lists compatible recreation as a use to be protected in Class AA marine waters.
 - HAR section 11-54-3(c)(2) indicates that the objective of Class A waters is protection of their use for recreational purposes and aesthetic enjoyment. Any other use shall be permitted as long as it is compatible with the protection of recreation in and on these waters. Additionally, Class A waters shall not act as receiving waters for any discharge which has not received the best degree of treatment or control compatible with the criteria established for this class.
- The recreational use and numeric criteria apply throughout the water column from surface to bottom.
- Hawaii's water quality standards allow zones of mixing for the assimilation of domestic, agricultural, and industrial discharges that have received the best degree of treatment or control. HAR section 11-54-9(c)(6)(C) indicates that every zone of mixing shall include, but not be limited to, conditions requiring the applicant to perform appropriate effluent and receiving water sampling. We note, however, that in determining the size of a mixing zone in a 301(h) modified permit, permitting authorities are constrained not only by state requirements, but also by EPA's 301(h) requirements at 40 CFR 125.62, under which water quality standards must be met, and water quality which allows for recreational activities must be attained or maintained, outside the zone of initial dilution. EPA's guidance on determining zones of initial dilution can be found on EPA's website at: <http://www.epa.gov/owow/oceans/regulatory/sec301tech/3a.html>.

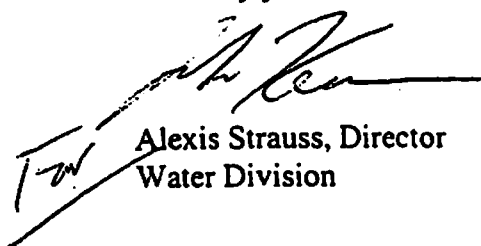
We would appreciate your confirmation in writing that we have correctly articulated your standards for recreational waters. In response to the new bacteria criteria promulgated by EPA, please indicate which of the SSM values set forth in the rule will apply to Hawaii's waters more than 300 meters from shore. In applying bacteria criteria, how does HDOH assess compliance when there are data points across multiple depths within the water column? Please indicate the approach used in such situations.

We are currently reviewing applications for renewal of 301(h) waivers and NPDES permits submitted by the CCH for its Honouliuli and Sand Island wastewater treatment plants. In analyzing whether CCH meets the criteria for a 301(h) waiver, we need to consider whether the

discharge from CCH's treatment plants will be able to meet Hawaii's water quality standards. In its comments to EPA on the proposed bacteria rule, CCH indicated it would not be able to meet EPA's bacteria criteria at the point of discharge at any of their four treatment plants which discharge to coastal recreational waters. We understand HDOH may wish to modify the use designation for Hawaii's marine waters, which could affect how criteria apply to recreational waters. However, unless and until such a change has been adopted by the State following a public comment period and approved by EPA, the current State standards, including EPA's promulgated criteria, are those that we must consider in evaluating CCH's 301(h) applications. Similarly, these are the standards the State of Hawaii must certify the discharge would meet in order for EPA to grant the 301(h) waiver.

Although we are raising these issues in the context of the Honouliuli and Sand Island permit renewal applications, we recognize that they have much broader impact. We look forward to working with you to ensure that Hawaii's water quality standards are implemented to protect uses of the State's waters. We would appreciate a written response to this letter as soon as possible so as to avoid further delays in processing the CCH applications. If you have questions regarding this letter, please do not hesitate to contact me at (415) 972-3572 or Doug Eberhardt of my staff at (415) 972-3420.

Sincerely yours,


Alexis Strauss, Director
Water Division

12/15/04

cc: Thomas Arizumi
Denis Lau
June Harrigan